

Remarks

Amendments to the Claims

Upon entry of the foregoing amendment, claims 1, 3-24 and 26-30 are pending in the application. Of the pending claims, claims 1, 24, 26, 27 and 30 are independent. Claims 1, 24, 26 and 27 have been amended to include a limitation with respect to the fluid communication channel. The amended claims and new claim 30 all specifically require a fluid communication channel capable of performing the function of enabling fluid to flow from one inflatable compartment into the other inflatable compartment.

The claims have been rejected as being unpatentable over Boyd in view of Saltness. This rejection is respectfully traversed for the reasons as previously argued in Amendment B as well as the additional reasons presented below. As the inventor and current owner of the base reference Boyd, the applicant is in a unique position to comment on the intent and purpose of the invention of Boyd. Boyd discloses a waterbed mattress including a vinyl watertight water bladder covered by an inflatable air cushion (see lines 1-2 of the abstract and lines 5-7 of column 1). The inflatable air cushion provides at least two functions which are important to the invention of Boyd. As can be seen in Figure 8, the air cushion forms an insulating layer 55 which greatly reduces the heat lost by the user's body due to conduction to the water in the water bladder (column 3, lines 56-62). The inflatable air cushion can also be used to adjust the firmness of the mattress without spilling any water (column 1, lines 44-48). Adding or removing air from the inflatable air cushion allows a user to adjust the feel of

the mattress. As pointed out by the examiner, Boyd fails to teach or suggest that the first and second compartments are in fluid communication with each other.

The examiner has stated that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mattress disclosed by Boyd to have a fluid communication channel, as taught by Saltness, to provide a means for maintaining a desired shape upon inflation. It is respectfully submitted that such a modification would destroy the intent and purpose of the invention of Boyd. Specifically, the inclusion of a fluid communication channel between the air cushion and the water bladder would negate the benefits identified above. The suggested modification would allow water to flow from the water bladder into the air cushion where the water would cause a user to suffer heat loss by conduction to the water. The suggested modification would also defeat the purpose of easily adjusting the firmness and comfort of the mattress.

In the response to arguments section of paper #9, the examiner refers to figure 7 and the disclosure that zone 51 is "at least partially filled with water" as indicative of the desirability of having water in both chambers. This does not mean that the first and second compartments are in fluid communication with each other. The device of Boyd specifically requires a watertight water bladder 13 and an airtight air cushion 23. The airtight construction of the air cushion 23 provides an insulating layer 55 between the user and the water bladder 13 (column 3, lines 56-57). Even if zone 51 is partially filled with water, the relatively small volume of water will rapidly warm to body temperature and thus will still provide an insulating layer between the user and the water bladder. The inflation valves 39 allow for individual adjustment of the firmness

of each zone (column 3, lines 34-37). If, as suggested by the examiner, the first and second compartments were in fluid communication with each other, then neither of these functions could be performed. Even if a zone is partially filled with water as shown in figure 7, the Boyd device still functions as intended only if bladder 13 is not in fluid communication with cushion 23 (i.e. the water in zone 49 comes from somewhere other than bladder 13).

In addition to the arguments against modifying the Boyd device, there is no indication of a problem of maintaining the shape of the Boyd device upon inflation. The Boyd device is a *waterbed* mattress that is intended to be filled with water in bladder 13. A waterbed mattress is held in a frame after being filled with water. The weight of the water and the frame itself provide the shape of the mattress. There is nothing to suggest that the Boyd device does not maintain a desired shape as it is filled with water. As a result the examiner's suggested modification of Boyd would be unnecessary to solve a non-existent problem.

As the proposed modification of Boyd in view of Saltness destroys the intended function of Boyd and does not solve a recognized or suggested problem, the examiner has failed to establish a prima facie case of obviousness. For this reason, applicant respectfully requests that the examiner withdraw the rejection. The dependent claims 3-23 and 28-29 should also be allowed at least for the reasons stated above.

Saltness also fails to establish a prima facie case of obviousness when considered alone. Saltness does not disclose separate top and bottom compartments having distinct layers. There is also no additional seal connecting the first inflatable compartment to the second inflatable compartment.

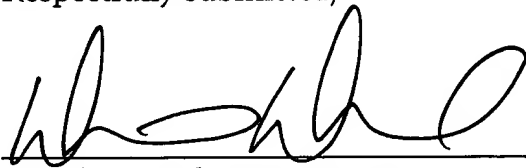
Conclusion

Accordingly, Applicants respectfully submit that independent claims 1, 24 and 26, 27 and 30 are allowable over the prior art of record. For similar reasons, Applicants urge that the dependent claims are also allowable.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'David R. Deal', is written over a horizontal line.

David R. Deal, Reg. #48204
Thompson Coburn LLP
One US Bank Plaza
St. Louis, Missouri 63101
Telephone: 314-552-6531
Fax: 314-552-7531

Marked-up set of Claims

1 (Amended three times). An air mattress comprising:

a first inflatable compartment having a length and width, when inflated, sufficient to support a human body, said compartment having a top, a bottom, and sides, said first compartment being composed of at least two layers of vinyl, one layer of vinyl forming the top of the compartment and the second forming the bottom; and

a second inflatable compartment disposed on the top of the first inflatable compartment and secured thereto at least along a portion of the first inflatable compartment at a point spaced inwardly from the sides of said first inflatable compartment, said second compartment extending generally the length and width of the top of the first compartment, said second compartment being of a size, when inflated, sufficient to support a human body;

said second compartment being composed of at least two layers of vinyl distinct from the two layers of vinyl forming the first compartment; said second compartment being inflatable to give the top of the air mattress a soft, pillow-like appearance and feel,

wherein said first compartment and said second compartment are secured together adjacent a fluid communication channel [connecting the first and second compartments] the fluid communication channel providing fluid communication between the first and second inflatable compartments to enable fluid in one of the first and second inflatable compartments to flow into the other of the first and second inflatable compartments.

24(Twice Amended). An air mattress comprising:

a first inflatable compartment having sides with a length and a width and defining a periphery;

a second inflatable compartment extending generally the length and width of the periphery; and

a perimeter seal connecting said first inflatable compartment to said second inflatable compartment, wherein said perimeter seal is spaced inwardly from the periphery,

at least one additional seal connecting said first inflatable compartment to said second inflatable compartment, said additional seal [includes a fluid communication channel between said first inflatable compartment and said second inflatable compartment] defining a fluid communication channel providing fluid communication between the first and second inflatable compartments to enable fluid in one of the first and second inflatable compartments to flow into the other of the first and second inflatable compartments.

26. (Amended) An air mattress comprising:

a first inflatable compartment having sides with a length and a width and defining a periphery;

a second inflatable compartment extending generally the length and width of the periphery, said second inflatable compartment comprising a pair of layers joined together by a plurality of discontinuous seals;

a perimeter seal connecting said first inflatable compartment to said second inflatable compartment, wherein said perimeter seal is spaced a distance from the periphery to give the air mattress a soft, pillow-like appearance and feel when said second inflatable compartment is inflated and to permit limited relative movement of the second compartment with respect to the first compartment; and

at least one additional seal connecting said first inflatable compartment to said second inflatable compartment, [wherein] said additional seal defining a fluid communication channel providing fluid communication between the first and second inflatable compartments to enable fluid in one of the first and second inflatable compartments to flow into the other of the first and second inflatable compartments.

[includes a fluid communication channel between said first inflatable compartment and said second inflatable compartment.]

27(Amended). An air mattress comprising:

a first inflatable compartment having a top, a bottom, and sides, said first compartment being composed of at least two layers of material, one layer of material forming the top of the first compartment and the second layer of material forming the bottom of the first compartment;

a second inflatable compartment having a top and a bottom, the second compartment being composed of at least two layers of material, one layer of material forming the top of the second compartment, the second layer of material forming the bottom of the second compartment, the second compartment being positioned above the first compartment;

a perimeter seal connecting the top of the first compartment to the bottom of the second compartment, the perimeter seal being spaced inwardly from the sides of the first compartment;

a fluid communication channel providing fluid communication between the first compartment and the second compartment to enable fluid in one of the first and second inflatable compartments to flow into the other of the first and second compartments; and

a plurality of ribs extending between the top and bottom of one of the first and second compartments. [a plurality of seal portions in the second compartment, the seal portions joining the top of the second compartment to the bottom of the second compartment in a manner such that air within the second compartment may flow around each of the seal portions.]